Sustainable Buildings Monitor: Redefining value

Establishing a purpose-driven framework to measure the true value of property

ISG's research and insight report – a UK perspective

At a glance

What is this report about?

- Establishing a new, sustainable framework to value property that supports the development of more resilient communities.
- Using publicly available data to demonstrate that sustainable development is commercially viable and a route to growth, not an obstacle.

Why is it needed?

- Environmental and social progress is needed and must be prioritised.
- The built environment industry is perfectly positioned to contribute to environmental solutions, but the effort must be collective.

How will it help?

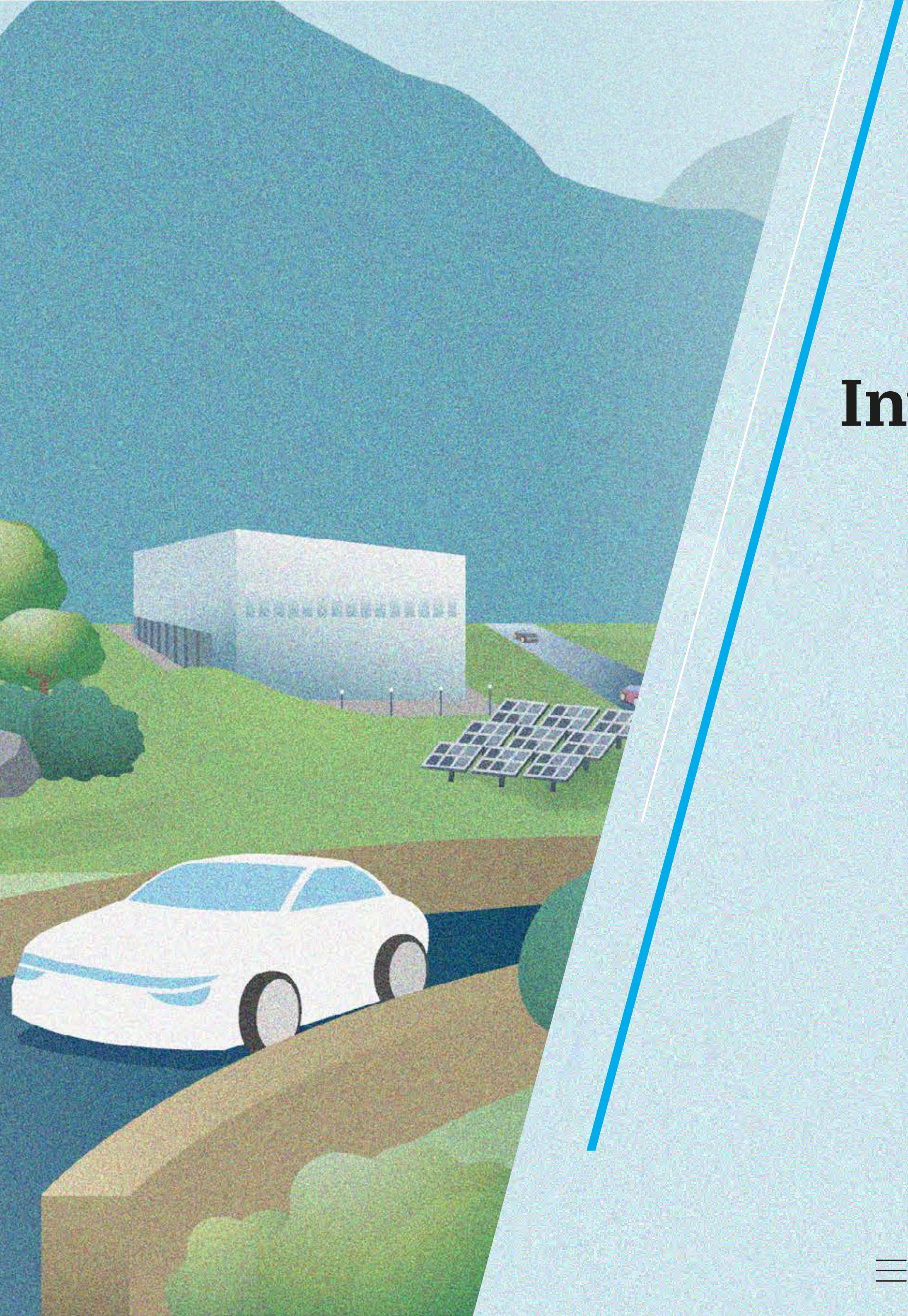
- By bringing the right voices and authorities together to establish a collective pathway.
- By encouraging practices of buildings that can be adapted for multiple future uses under shared guardianship over a lifetime.
- By helping reveal opportunities to expedite programmes, rationalise location strategies, and aid local authorities in incentivising investment towards revitalising communities.

Who is it for?

- Developers and asset owners
- Occupying organisations, procurement teams and consultant partners
- Central and devolved government and local authority leaders

Collectively hereafter referred to as 'built environment decision-makers'.

Contents



Introduction

Introduction

The opportunities to commit to our ESG goals are present in everything we do as an industry.

The built environment industry can redefine how we value property.

We all have the opportunity to play a role in creating resilient communities set up for sustainable and ethical growth. After three years of radical global change, our lives are different. The rules of property demand are changing, with less focus on footfall and commutability. At the same time, our infrastructure faces scrutiny like never before. We know the long-term consequences of indifference to the environment, and the collective vision for the future is uniting around environmental, social and governance (ESG) values. Inaction or the sole pursuit of short-term gains is no longer a viable commercial strategy. This research report is a voice in the burgeoning discussion of how to identify areas of the UK with the best opportunities to build differently, and better.

Why do we need a new framework?

Built environment decision-makers can pivot interests towards high-performing and flexible buildings, with multiple uses and guardians. A new framework, based on long-term ESG fundamentals, will augment the collective balance sheets.

ESG values aren't a trend. They're a necessity, driving both value creation and growth. The opportunities to commit to our ESG goals are present in everything we do as an industry. Our previous research, '**The power of place**', focused on recognising the value of property when treated as an asset, not a cost, and how it can be used as a lever of competitive advantage. This research revealed the threats of lack of space for placemaking and access to sustainable infrastructure; green funds exist but distribution is slowed by lack of resources in comparative asset performance across regions. Traditional valuation methodologies are evolving, and the advantage now exists for those that take the more holistic view. Benchmarking against ESG criteria naturally leads to a redefinition of the value of property.

A new framework, based on long-term ESG fundamentals, will augment the collective balance sheets.

We must ask ourselves, how prepared are we to augment traditional linear metrics of asset performance with other evidence?

What does the new framework look like, and how can it be used?

In our first **'Sustainable Buildings Monitor'** report, we called out there being less than 10,500 days until the 2050 'clock' runs out. Building on that research, helping to illuminate the path towards a net zero legacy for our cities, towns and communities, and with the clock still ticking, ISG has created this new framework for asset valuation by presenting an index based around purpose-driven metrics. Research encompassed in-operation performance data, social value, net zero, embodied carbon and circularity measurements, as well as proximity to green energy sources and local labour markets. This new research reveals key and potentially untapped areas of development opportunity across the UK.

We hope our research can inform future strategic planning and is an opportunity for all regions in the UK to share their knowledge. We're encouraging the debate and facilitating knowledge transfer; bringing built environment decision-makers to the table and stimulating those conversations based on our findings. ISG seeks to think differently and be a force for good in the built environment.

To be truly sustainable we need to work beyond the constraints of current market forces. We must ask ourselves, how prepared are we to augment traditional linear metrics of asset performance with other evidence? Can we collectively establish a new way of measuring return on investment, by genuine contribution to society?

This new research reveals key and potentially untapped areas of development opportunity across the UK.

Creating the index

Creating the index

ISG commissioned the Centre for Economics and Business Research (Cebr) to aid in the creation of a framework presenting a comprehensive index analysed to the local authority level. This is based on:

- **The attractiveness of areas to investors.**
- **The areas with the greatest untapped opportunity for development.**

The index is not limited to traditional and mostly financially focused metrics. It also considers broader societal trends and increasingly important environmental and social goals. Environmentally focused metrics (including energy supply, emissions and transport infrastructure) are included to provide a novel, holistic overview of potential property value in each local authority. An idea of real estate valuations viewed as a vital part of the wider societal agenda.

The index focuses on environmental and social goals, while acknowledging the built environment as a key player in an economy focused on driving growth through innovation.

This new framework provides a useful guide for maximising sustainable investments; a benchmark for raising standards and expectations across the UK. Consistent nationwide investment will prepare communities for a resilient future.

The index focuses on environmental and social goals, while acknowledging the built environment as a key player in an economy focused on driving growth through innovation.

> These three distinct pillars serve as the lenses through which areas were examined and evaluated by their ability to holistically create value.

To create the index, key indicators (which are listed in the methodology) were established to measure performance criteria that would capture return on investment (ROI) effectively. The index organises those indicators into a simple database, through three pillars:

Environmental and social factors

- Measuring an area by its conduciveness to environmental and social sustainable living.

People and workforce factors

- Measuring an area by its capacity to foster innovation and employment opportunities.

Financial and commercial factors

- Measuring an area by its current property valuations, and a baseline view of its ability to attract investment.

These three distinct pillars serve as the lenses through which areas were examined and evaluated by their ability to holistically create value.

This approach provided a unique score within each metric, for each local authority. This allows for separate figures for each indicator and pillar, as well as overall local authority scores.

Also aggregated are the overall scores of all analysed local authorities into a regional score. This is calculated using a weighted average, based on population estimates of each local authority as a share of their respective region's population.

An example – if 10% of a region's population live within a local authority, that local authority's pillar score will be assigned a 10% weight in overall scores for that region.

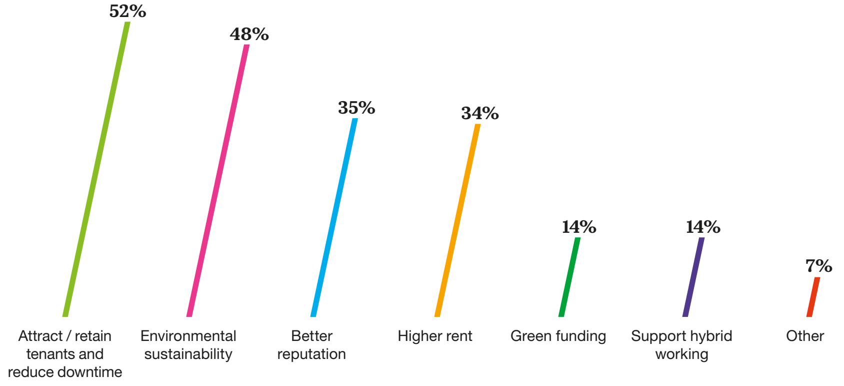
Redefining the value of places to create greater opportunity

Redefining the value of places to create greater opportunity

The forecasting of property value has traditionally relied upon viewing property as solely financial assets. Market forces of supply and demand, driven by location and cost factors, have now begun to adapt and expand.

Developers have cited their investment in ESG as owing to it being a critical issue for the tenants they wish to attract.

The primary reason investors invest in improving energy performance is to attract and retain tenants.



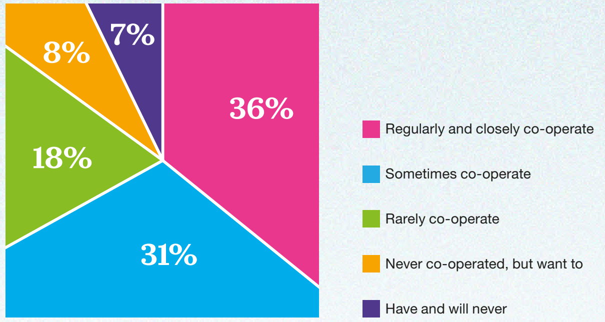
Source: Sapio Research, Cebr analysis*

Developers have cited their investment in ESG as owing to it being a critical issue for the tenants they wish to attract.

Key for developers and asset owners to build resilience into their properties is appealing to a broad spectrum of tenants. Their assets must measure themselves by a new yardstick of criteria, ultimately securing anchor tenants and impacting their bottom lines.

A good place for the construction industry to start is by addressing our approach to projects. Before time and resource become too scarce, why not ensure all the necessary voices are on board at the outset? If knowledge, learnings and data were shared more freely, the industry could operate as custodians of our built assets and align on how to maximise value for all stakeholders. With a slight adjustment of mindset, we can commit to collaboration.

The majority of investors (85%) co-operate with local authorities in environmental projects, however, 15% of investors have never co-operated with local authorities.



Source: Sapio Research, Cebr analysis*

* From ISG's research and insight report '**The power of place: The true cost of inaction**'.

Regional trends data – traditional metrics v our new holistic framework

Using the new framework, the vast breadth of opportunity is clear.

Figure 1:
Using traditional metrics
Aggregated scores, by region, with the 20 best-performing local authorities pinned

Source: Various, Cebr analysis

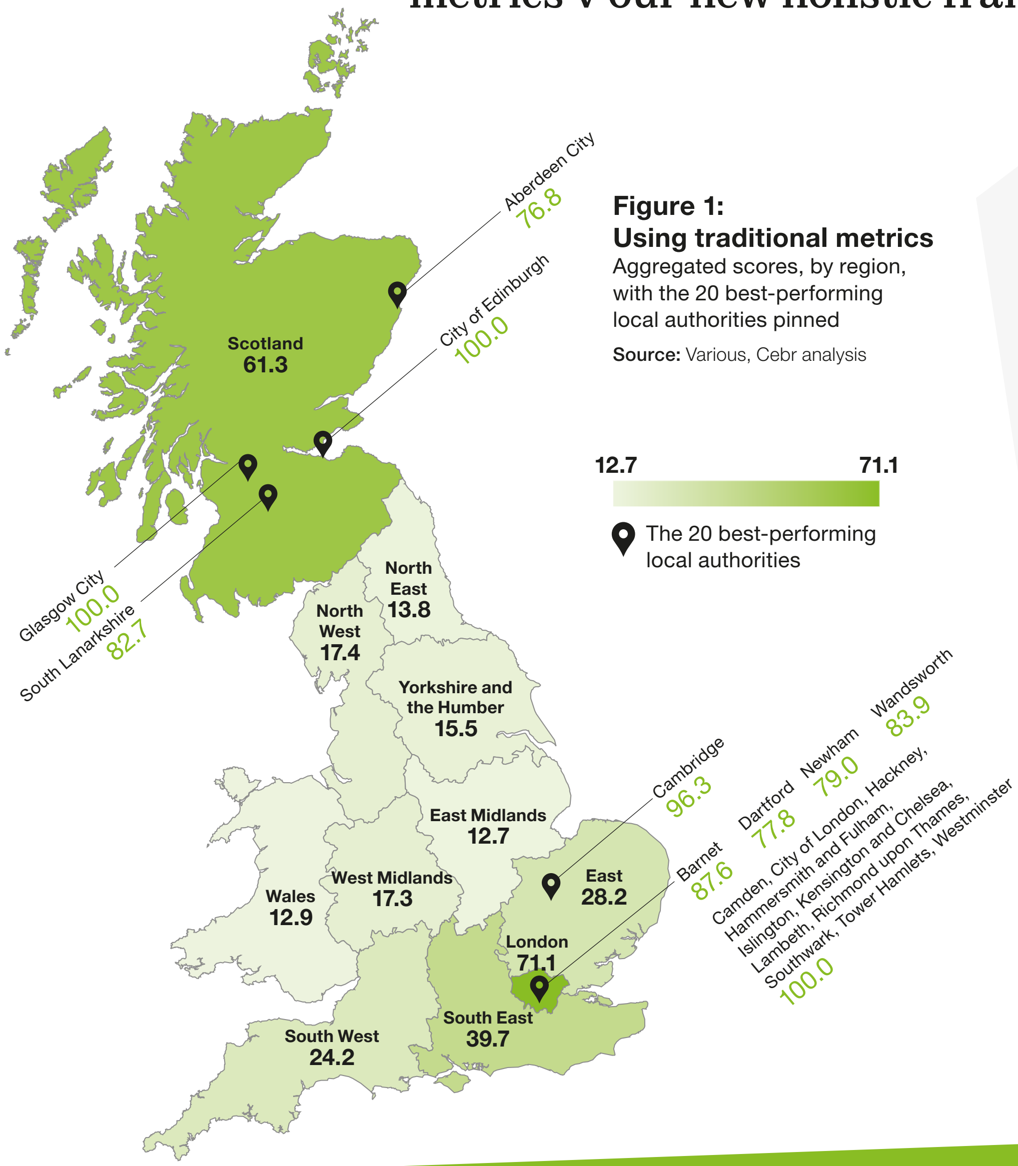
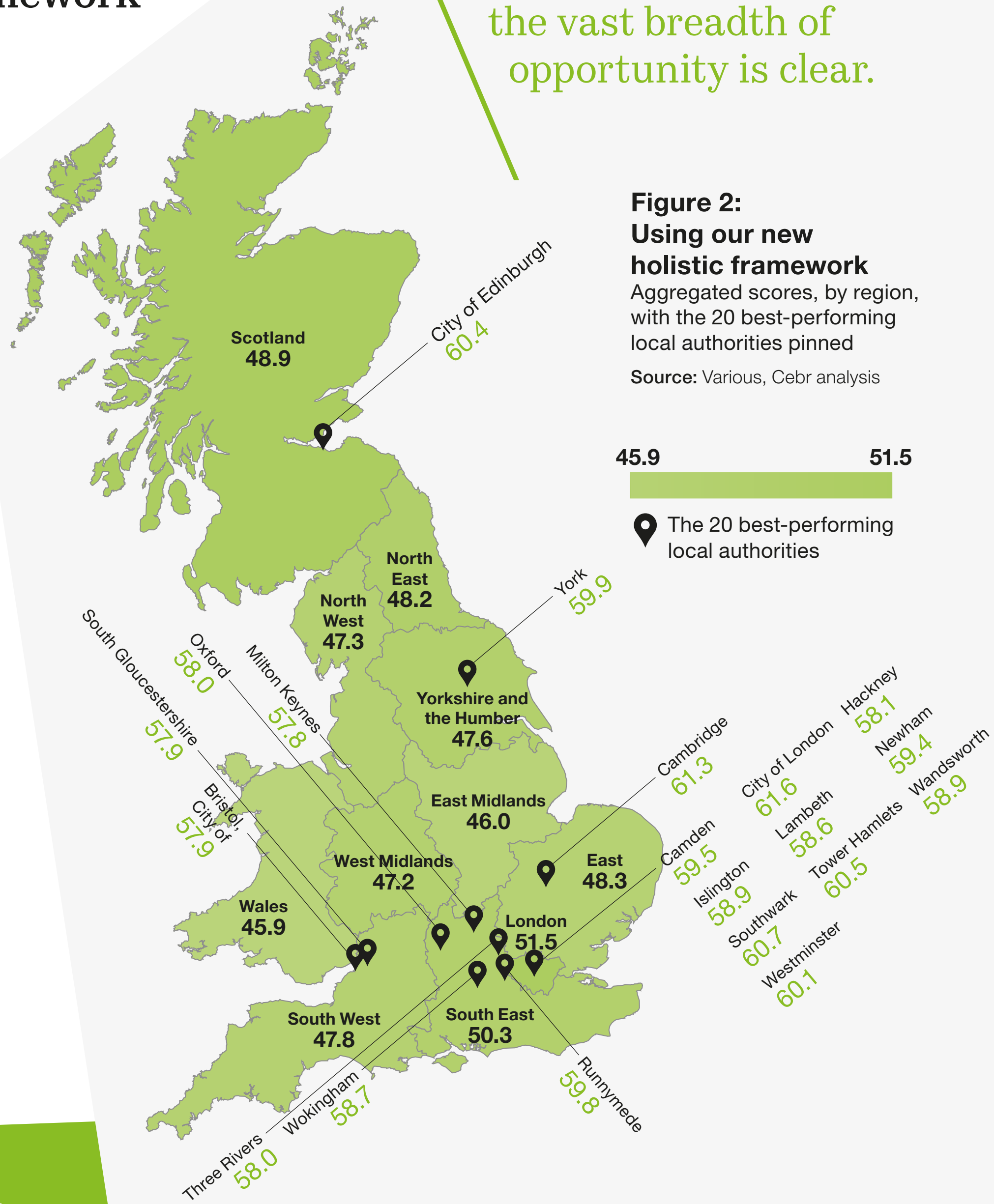


Figure 2:
Using our new holistic framework
Aggregated scores, by region, with the 20 best-performing local authorities pinned

Source: Various, Cebr analysis



What does a comparison of the heat maps tell us?

- In Figure 1, the highest values are concentrated in three city locations, whereas in Figure 2, opportunity is spread more widely across the UK.
- Figure 2 shows that growth across regions is starting to mirror and reflect ambitious new location strategies from emerging industries that are an essential part of the UK's growth strategy.

The North East leapt up 34 points when compared by the different metrics, to place fifth in the overall holistic ranking. This evidences the new framework's ability to highlight areas of vast potential.

Examining the UK through the new framework

The data set using traditional methods of purely rateable values shows opportunities are based on key cities and the City of London, alongside a polarised Scotland. Based on the new holistic framework, we see a much more balanced picture, with strengths across the regions. Using this new lens, the North East, East Midlands and Wales could be the regions most primed for growth.

These regional investment hotspots are borne from different data to the traditional financial models and heat maps that investors use today. We must understand the impact both methodologies will have on the trajectories and resilience of communities. Key regions such as London, Cambridge and Edinburgh faring well is not surprising. By interrogating this data, opportunity to match investment where there is greatest scope development across the pillars, further explored below, can be found.

Our new holistic framework demonstrates an opportunity in each region to match skills and develop a local workforce to meet planned investment.

Which regions are performing across the full index?

- London stands as the best-performing region, finishing first across the pillars of environmental and social factors, and people and workforce factors.
- However, the North East finishes first in the financial and commercial factors pillar. This is due to relatively lower construction costs, and proximity to enterprise zones (owing to numerous regional Local Enterprise Partnerships).
- Alongside London, the South East and Scotland round out the top three regions. Tower Hamlets places fourth in the overall index – despite not being among London's richest boroughs, it succeeds above Northern powerhouse hotbeds with strong cultural, demographic and economic accomplishments. York emerges as the only Northern local authority in the top 10.

Where is there most opportunity to improve?

- The North East leapt up 34 points when compared by the different metrics, to place fifth in the overall holistic ranking. This evidences the new framework's ability to highlight areas of vast potential.
- Wales places third in the environmental and social factors overall, outperforming all regions other than London and the South East. Wales came first among all regions in recycled waste, and second in renewable energy potential, greenhouse gas emissions and considering regional performance in the Access to Healthy Assets and Hazards (AHAH) index. As is a trend for Western regions in general, Wales is forging ahead as a region.
- When considered using the holistic framework, the East Midlands climbs to place tenth overall. This is likely due to its improved performance across all indicators in the financial and commercial factors pillar, especially in the online connectivity and proximity to enterprise zones indicators.

Our new holistic framework demonstrates an opportunity in each region to match skills and develop a local workforce to meet planned investment.

An overall view of regional performance across each of the three pillars is depicted in Figures 3 to 5.

Spotlight on... environmental and social factors

Notable environmental and social factors pillar scores

- Richmond upon Thames places first and is notably the sole London borough in the top 10. This performance was driven by high scores on electric vehicle (EV) charging devices, indices of multiple deprivation (IMD) indicators, and strong transport links.
- Milton Keynes, one of the UK's newest cities, places second overall, and establishes itself as one to watch. The local authority exhibits strong performance on all pillars, demonstrating that its successes in sustainable living are reinforced by the capacity to foster innovation and employment opportunities, and attract investment.
- North Wales' success in the environmental and social factors pillar is notable, with the rest of the top 10 concentrated in Scotland and South England. Small factors within the indices produce surprising results, such as in Scotland, the small coastal town of Moray places within the top 10 of the environmental and social factors pillar.

"We welcome this report as it shows how when like-minded organisations partner, they can deliver value that goes beyond economic metrics. South Gloucestershire is a great place to invest and we welcome businesses, particularly in advanced manufacturing and innovation, that look to contribute to our area with far more than GVA."

Steve Reade
Cabinet Member for Regeneration, Environment and Strategic Planning
South Gloucestershire Council

London could find its global brand and Super City status diminished if it does not address core environmental and social factors.

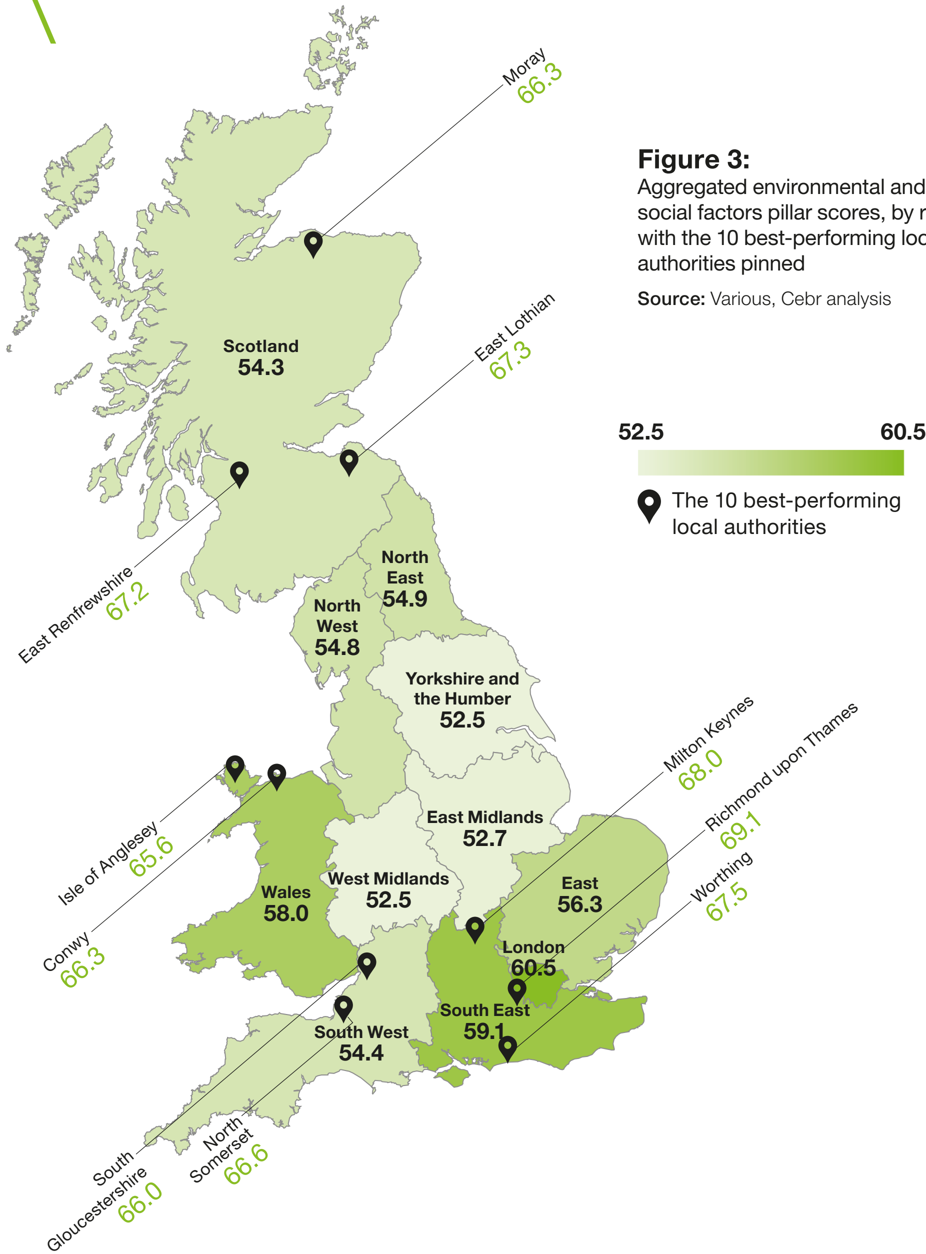


Figure 3:
Aggregated environmental and social factors pillar scores, by region, with the 10 best-performing local authorities pinned

Source: Various, Cebr analysis

Spotlight on... people and workforce factors

Is there scope for the planning phase to catalyse a review of local skills and resources?

Notable people and workforce factors pillar scores

- The South currently leads the workforce data – but given the potential for growth in other regions, and with a more location-flexible workforce, perhaps talent retention will become more challenging. Transference between traditional, prosperous industries and emerging industries for high-quality, well-paid sustainable jobs is likely.
- Oxford, Cambridge, the City of London and the City of Edinburgh all feature in the top 10, thanks largely to hosting prestigious institutions.
- Low scores for the higher education institutions indicator are a key theme across the bottom 10, with all local authorities represented scoring zero.

"For VERB, returning value to communities, and working in truly sustainable ways, is non-negotiable. This report demonstrates the potential for 'Levelling Up' across the UK, and the ways that those involved in the creation of the built environment can influence this. We must all play our part in championing project delivery which supports innovative and sustainable industries while, crucially, investing in long-term development of local skills."

Chris McDermott
Chief Executive Officer
VERB

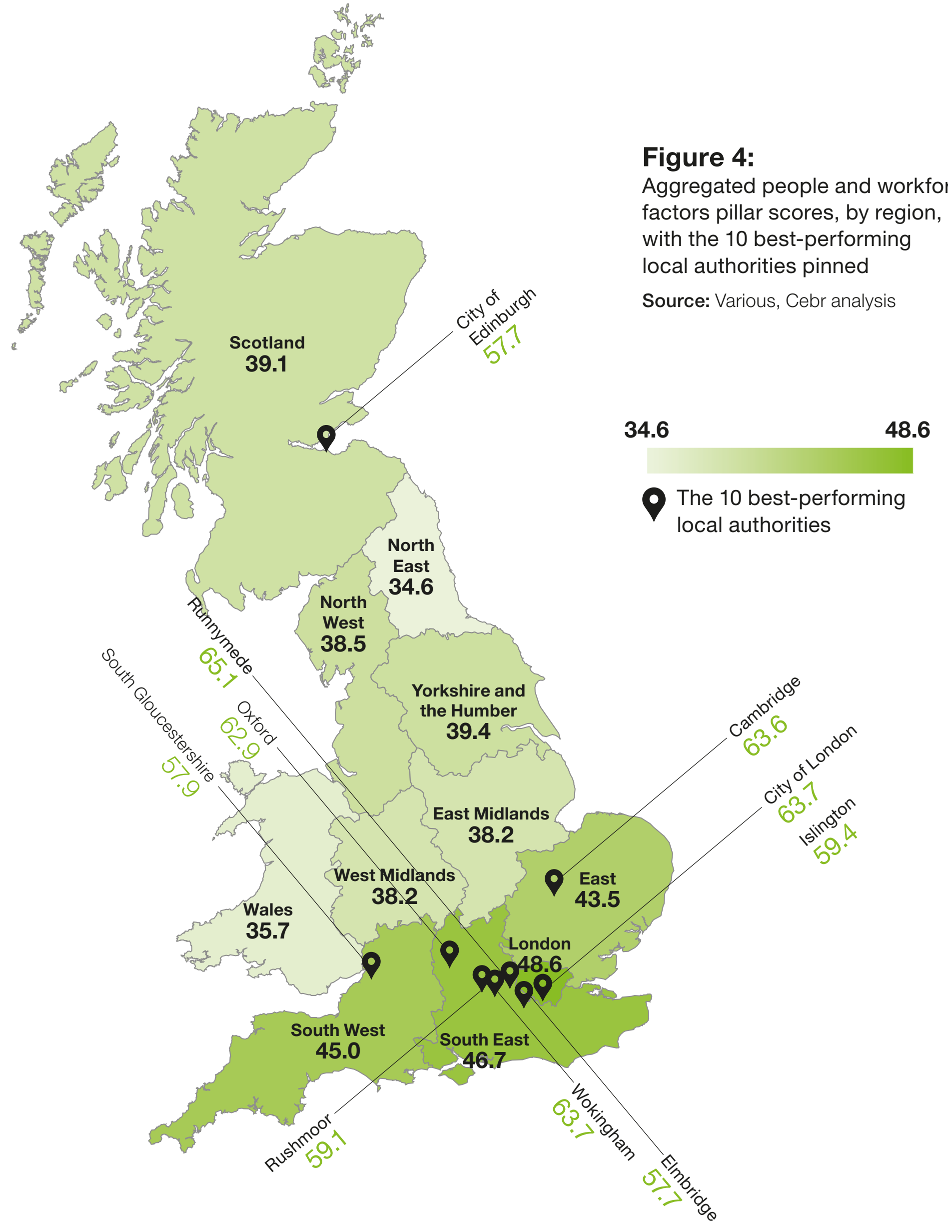


Figure 4:
Aggregated people and workforce factors pillar scores, by region, with the 10 best-performing local authorities pinned

Source: Various, Cebr analysis

Spotlight on... financial and commercial factors

Notable financial and commercial factors pillar scores

- While the City of London ranks in the top 10, it falls behind the City of Edinburgh and Glasgow – which rank first and second respectively. This is due to strong performance across most indicators in this pillar, and both cities playing host to enterprise zones while also housing lower construction costs compared to other UK regions.
- London is still strongly represented, with Newham, the City of London, Tower Hamlets and Westminster occupying places three to six respectively.
- York, Newcastle upon Tyne, Cardiff and Dundee City are the remaining local authorities that round up the top 10 for this pillar – notably Newcastle upon Tyne was in the top 10, emerging above the North's other big cities conventionally known for attracting investment, such as Leeds, Liverpool and Manchester, with Dundee City also appearing in the top 10, compared to other Scottish regions known to attract investment.
- Commonly contributing to poor scores for most local authorities in the lower percentile is lack of proximity to enterprise zones. Six of the 10 lowest-placing local authorities score zero on this indicator.
- All local authorities placing towards the bottom of the pillar see relatively lower levels of foreign direct investment (FDI) inflows.

Perhaps surprisingly, this pillar indicates a trend towards a Northern bias, which is correlated to an ability to attract FDI. This may be linked to emerging sustainable industries perhaps less reliant on proximity to urban centres, in favour of more competitive costs and proximity to enterprise zones.

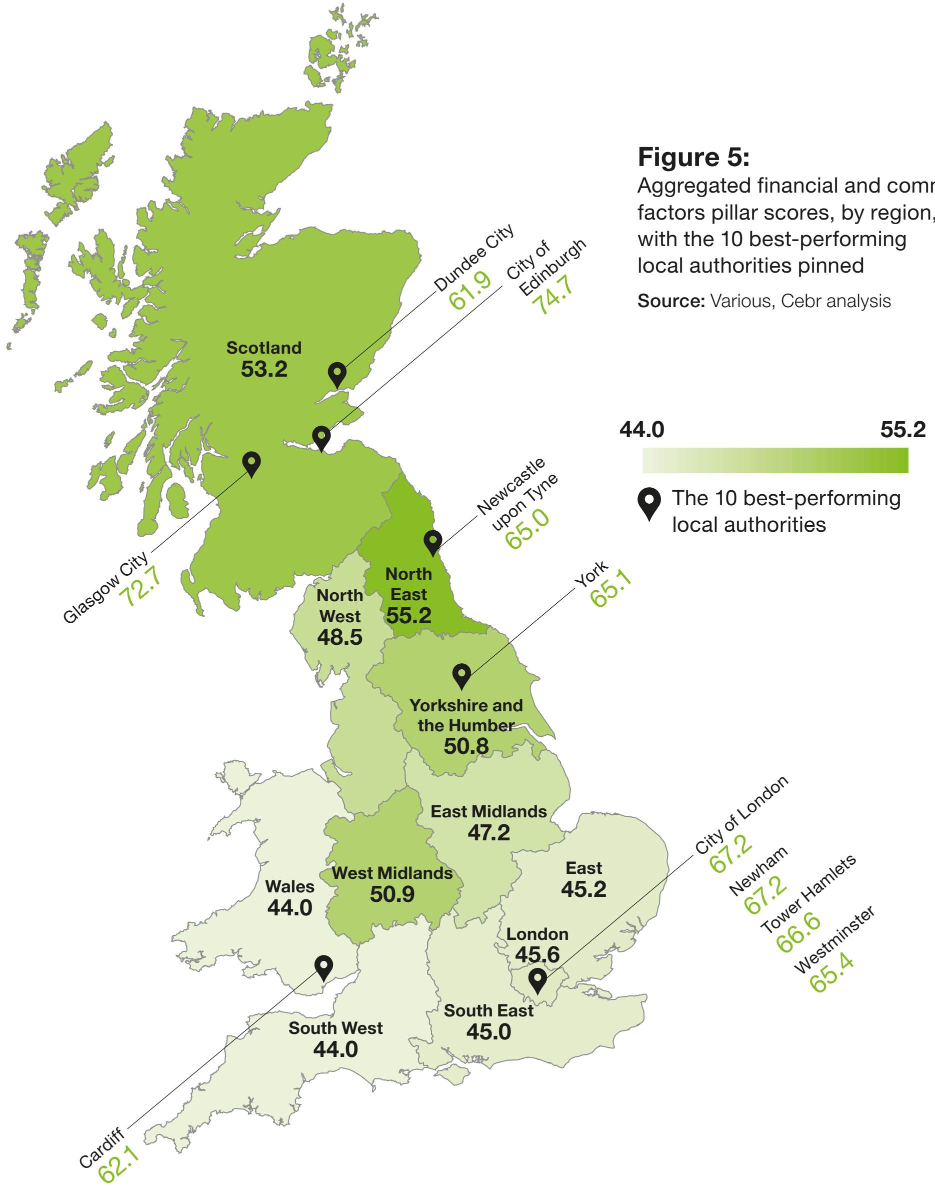


Figure 5:
Aggregated financial and commercial factors pillar scores, by region, with the 10 best-performing local authorities pinned

Source: Various, Cebr analysis

Results interpretation

Results interpretation

The pillars for both the environmental and social factors, and people and workforce factors, exhibit strong negative correlations with the financial and commercial factors.

What regional trends have emerged from the data, and what do they show us?

The North-South divide

What does the data suggest about the North-South divide?

When considering the North-South divide bisecting English regions, the Southern regions (London, the South East, the South West and the East) are performing better than their Northern counterparts (the North East, the North West, and Yorkshire and the Humber) in general.

This is challenged by the regional individual pillar scores. Here, while the South outperformed the North in the environmental and social factors, and people and workforce factors, it fell behind in the financial and commercial factors. Considering these regional results broadly, the pillars for both the environmental and social factors, and people and workforce factors, exhibit strong negative correlations with the financial and commercial factors.

The North's better performance in the financial and commercial factors is owing to robust readings in the construction costs and proximity to enterprise zones indicators. The South sees far higher construction costs, not least due to the likelihood of higher input costs. Indeed – the South's relatively stronger performance in the people and workforce factors suggests the presence of a workforce that is better equipped with the required skills, in turn translating to higher labour costs. The North could see promising investment by leveraging its relative strength on the financial and commercial pillar and investing in the people and workforce factors.

The North could see promising investment by leveraging its relative strength on the financial and commercial pillar and investing in the people and workforce factors.

Considering the UK government's Levelling Up narrative, higher scores for the North seems to suggest that concerted efforts have been made in establishing more accessible enterprise zones in these areas.

Enterprise zones

Has the role of enterprise zones shifted the dial in the North East?

The indicator monitoring proximity to enterprise zones is very telling. Here, the North performs better, with the North East scoring highest. This is due to the presence of three enterprise zones across the region – North East, North East Enterprise Zone 2 and Tees Valley – with sites that span all local authorities in the region.

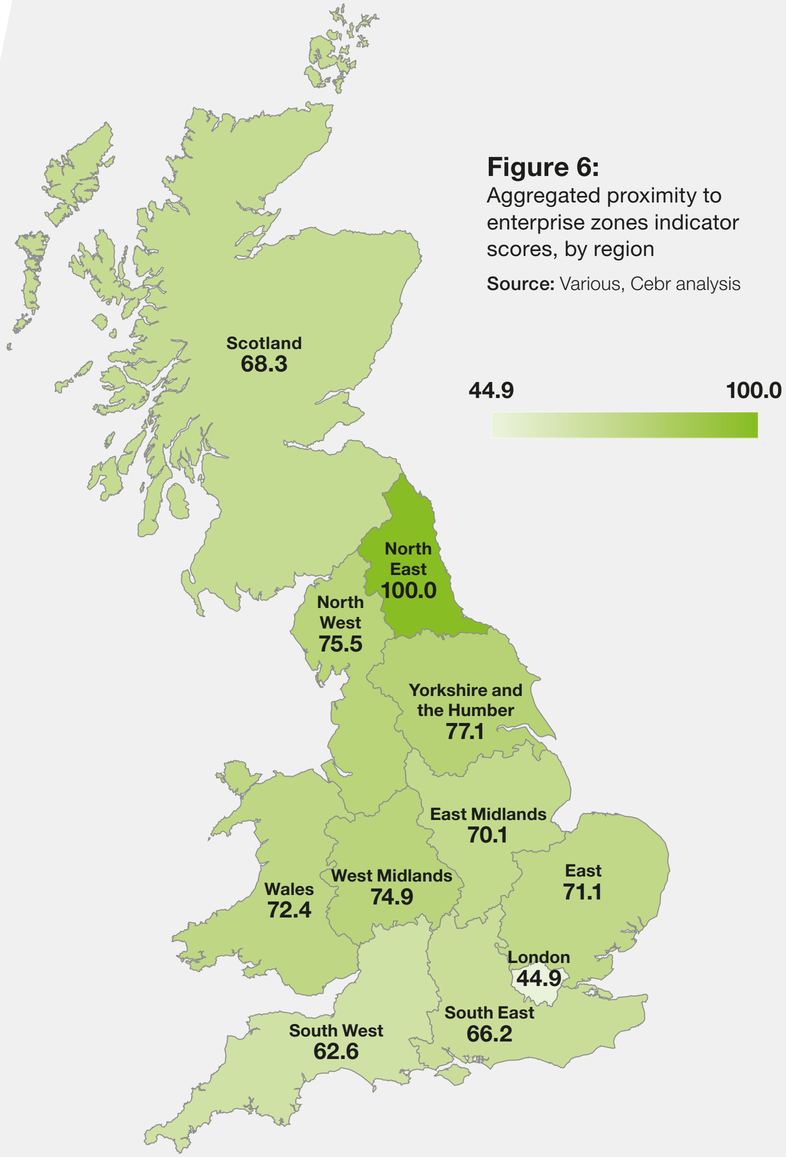
As with the construction costs indicator, better performance is seen in general from the North than the South. Considering the UK government's Levelling Up narrative, higher scores for the North seems to suggest that concerted efforts have been made in establishing more accessible enterprise zones in these areas. This is in a bid to incentivise businesses to contribute to the local economy and close the North-South divide. The North also needs to leverage this into the transformation of skills needed to support sustainable growth.

A full overview of the regional performance for the proximity to enterprise zones indicator can be found in Figure 6.

The North also needs to leverage this into the transformation of skills needed to support sustainable growth.

Figure 6:
Aggregated proximity to enterprise zones indicator scores, by region

Source: Various, Cebr analysis



Regional investment

How can regional investment in infrastructure increase holistic property value?

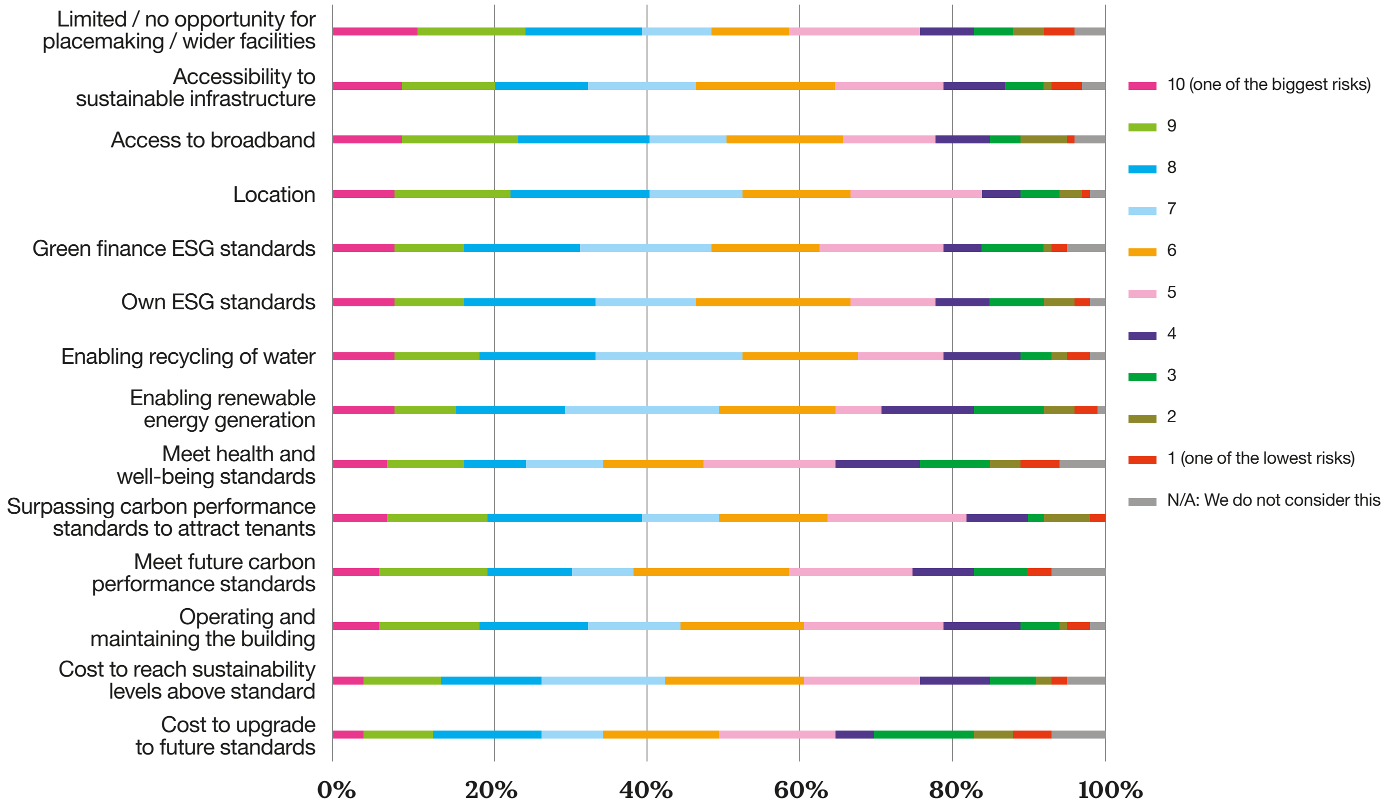
As previously cited, investors have noted lack of space for placemaking and access to sustainable infrastructure as among the biggest current risks to assets. If we are to drive investment, we must start mapping this as belonging to a widely accepted indicator of asset value.

This research sought to investigate how regional investment into sustainable infrastructure translated to regional performance on our constructed index. While no comprehensive sources detail investment into sustainable infrastructure, the Office for National Statistics (ONS) does provide regional breakdowns on construction output for different types of work.

Accordingly, the research utilised share of construction output dedicated to new infrastructure work, and new private commercial work (excluding infrastructure) in the 12 months to September 2022, as a proxy for investment into sustainable infrastructure.

The regional breakdowns are illustrated in Figure 7.

The biggest risks associated with investing in non-residential properties identified by landlords and investors.



Source: Sapio Research, Cebr analysis*

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* From ISG's research and insight report '**The power of place: The true cost of inaction**'.

A comparison of our holistic framework and the shares shown in Figure 7 helps in cementing the view that regional investment in infrastructure does aid in driving up holistic property value.

Analysing the impact of construction output on holistic property value

Notable highlights

- London sees the highest share of output on new infrastructure work, and new private commercial work (excluding infrastructure).
- The North East and Scotland round up the top three.
- The South East sees the lowest share of spending on new infrastructure work, and new private commercial work (excluding infrastructure).

When compared to the regional index, there is a strong positive correlation between our holistic framework and the shares shown in Figure 7. Indeed, there is a statistically significant relationship at the 10% level, where a one percentage point increase in the share of construction output dedicated to new infrastructure work, and new private commercial work (excluding infrastructure), on average, is associated with a 0.59 point increase in our index reading.

While this cannot be entirely interpreted as casual, especially given our original premise of using the shares as a proxy for investment in sustainable infrastructure, a comparison of our holistic framework and the shares shown in Figure 7 helps in cementing the view that regional investment in infrastructure does aid in driving up holistic property value.

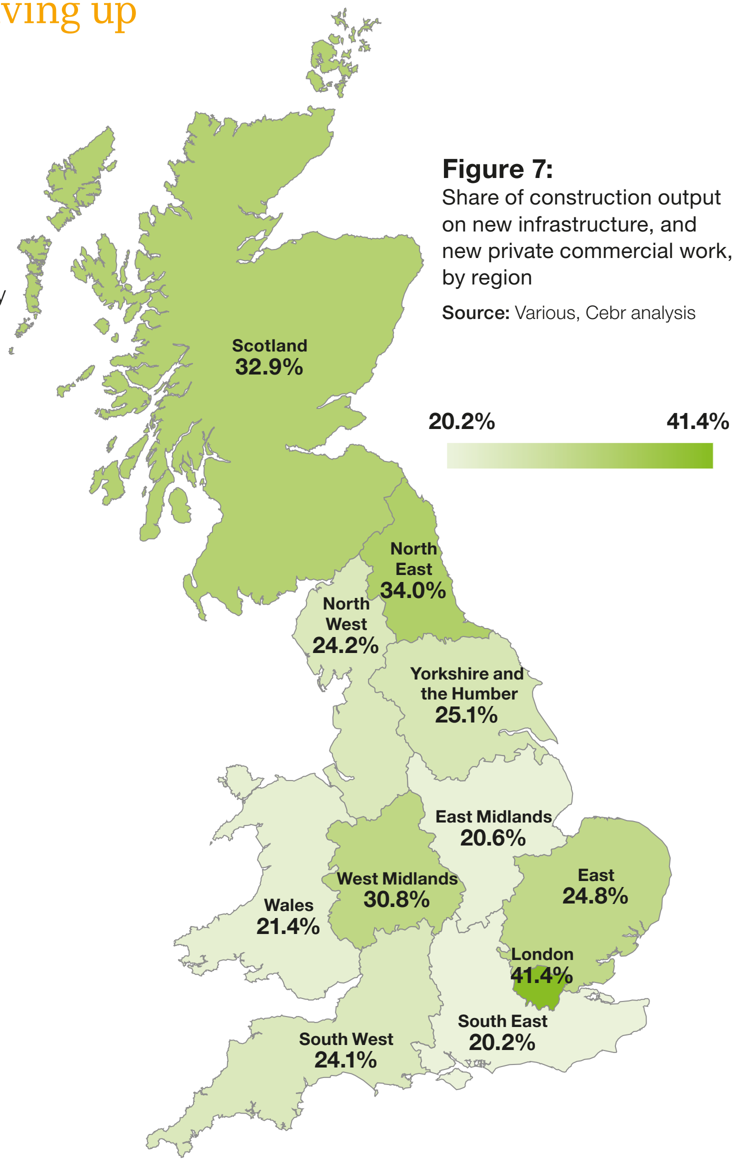

Figure 7: Share of construction output on new infrastructure, and new private commercial work, by region

Source: Various, Cebr analysis

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Conclusion: So, what does this all mean?

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A holistic evaluation of the UK shows a dramatically different landscape for investors, developers and property decision-makers.

What are the key data takeaways?

From all the indices explored and the data compared, the primary takeaway of 'Sustainable Buildings Monitor: Redefining value' is simple.

As demonstrated on page 12, a holistic evaluation of the UK shows a dramatically different landscape for built environment decision-makers. It shows that a fairer, more equal UK is within our collective grasp. Growth across all regions is starting to align to ambitious new location strategies from emerging industries, which make up essential parts of the UK's growth strategy.

The data reinforces what critical thought suggests:

- Regional investment in infrastructure does aid in increasing holistic property value.
- The UK possesses huge potential and pockets of untapped excellence.
- Environmental and social considerations are a route to growth, and can support 'Levelling Up'.
- Investment in higher education outside the South would also make a significant contribution towards 'Levelling Up', as a highly educated workforce attracts investment.

Since the COVID-19 pandemic, property valuations are no longer as predictable as they once were. Homeowners are seeing a projected 5% fall in property value in 2023, the business rate changes are recalibrating the commercial landscape, and EPC ratings are leaving owners with the risk of stranded assets following the Minimum Energy Efficiency Standards (MEES) legislation being introduced. City-centre locations can no longer rely upon the rhythm of a Monday to Friday footfall, and yet there is the promise of a town centre revival as more of us work flexibly. A variety of factors – such as the impact of the war in Ukraine on energy prices, Brexit, migration, tight labour markets and an ageing demographic – have directly or indirectly impacted property valuation and asset portfolio management. It's a complex picture and the rules have changed – we are proposing that our asset valuation must change too. To be accurate and build resilience, our asset valuation system must be as flexible and multifaceted as the market.

Throughout this report, we have made references to ESG considerations. We readily acknowledge that there are challenges around defining ESG terms – for which the data, definitions and measurements are still new – but we can validate a change in our focus based on a more holistic understanding of value.

To be accurate and build resilience, our asset valuation system must be as flexible and multifaceted as the market.

> A reframing of property valuations and a readjustment of hierarchies in the built environment sector will ensure that key voices are heard at the earliest stages.

So, where do we go from here? We can...

Bring the right voices to the table earlier, unifying stakeholders under common goals

We mentioned the need to bring the right voices to the table in our introduction. It is one of the single most important objectives of the 'Sustainable Buildings Monitor'. A reframing of property valuations and a readjustment of hierarchies in the built environment sector will ensure that key voices are heard at the earliest stages. A key practicality in this ambition will be consideration of time, and how contractors, customers and the supply chain can all agree early on project drivers, desired outcomes, design intent and buildability, and more. This will also lead to richer partnerships between public and private stakeholders, and regionalised incentivisation plans based on local requirements and newly untapped potential.

Raise our ambitions from mitigating harm to adding value from the outset, and throughout a building's life cycle

Once a property has been through the planning process, it is too late to retroactively adopt construction solutions that deliver on essential environmental and social outcomes if they haven't already been embedded. Our goal in building should be performance, and to achieve this we must reshape our ambitions, and create buildings with life cycles for multiple uses under custodian models.

Build for deconstruction

When considering environmental performance, we must remember we don't have indefinite space to build on. In fact, 80% of the buildings that will exist in 2050 are standing today. To meet our 2050 net zero commitments, we must accelerate our deep retrofit programme to bring buildings up to energy performance and circularity standards. We know that buildings are potential materials banks. Existing buildings are reusable structures – they sequester carbon and retain valuable material resources. New buildings must embrace circularity principles; they must be designed for efficient deconstruction and retain materials at their highest value.

Invest now in the skills pipeline to support growing sectors and long-term regional development

The correct team must be in place. With all this work to be done now and in the future, who will be doing it? Behind every plan, goal and workforce are individuals who must be equipped with the right skills and motivations. Key will be enticing bright young problem solvers and creative thinkers; construction can be the most impactful and rewarding industry if we position it correctly. There is no element of our lives untouched by the built environment, and entering the industry can mean positively impacting climate change, regional development, employment and social well-being. We only need be honest about our progress, and steadfast on our commitment to change.

ISG hopes this report and its findings help to build resilient communities. We encourage built environment decision-makers to join us and progress the conversation.

> There is no element of our lives untouched by the built environment, and entering the industry can mean positively impacting climate change, regional development, employment and social well-being.

Methodology and disclaimer

Methodology and disclaimer

This report was compiled by ISG, and informed by research and analysis by the Centre for Economics and Business Research (Cebr). It presents a framework for a comprehensive index analysed to the local authority level.

This section outlines the methodology, data sources and data limitations used to compile the index, as well as the indicators for the three pillars of environmental and social factors, people and workforce factors, and financial and commercial factors.

Our index construction methodology involves scoring each local authority based on its performance as measured by the particular indicator. For each indicator the same set of steps were followed, allowing us to assign a score between 0 and 100 to each local authority.

- To account for outliers, each data point was checked to determine if it fell outside the mean +/- 2 standard deviations (s.d.) range. If it did, the local authority was assigned a value equal to either mean +2 s.d. or mean -2 s.d.
- The min max approach was used to assign an index value to each local authority. Specifically, the formula used was (data point – series min) / (series max – series min).
- Given that a higher overall index score indicates better performance, for indicators where a lower figure signified a better performance (e.g. share of EPC ratings above 'C'), the inverse of the data point or its negative equivalent was used.

Once scores between 0 and 100 were assigned to each local authority within each indicator based on the previous steps, the indicators were weighted to calculate the overall pillar score, which was then in turn aggregated into the overall index score.

This approach provided a unique local authority score for each metric, showing its position relative to all other local authorities. This allowed us to present separate figures for each indicator and pillar, as well as an overall local authority score.

We acknowledge there are a myriad of other environmental and social indicators that can be assessed when widening the property value debate. We only assessed indicators that can be used within the context of local authorities, which means others that were not suitable were not used.

It is to be noted that this method produced **relative** scores – i.e. a score of 100 is associated with the best-performing local authority for a given indicator or pillar, while a 0 score is assigned to the worst-performing local authority. It is therefore not possible to infer any information about the **absolute** performance of an area for a given indicator, as scores need to be interpreted in relation to the best-performing (or worst-performing) local authorities in the index.

The lists on the following pages show the indicators for each pillar.

Environmental and social factors

#	Indicator	Description	Source	Availability	Comment
1	Installed capacity for renewable energy	Renewable energy capacity (MW) scaled to commercial building stock	BEIS	2020	
2	Number of electric vehicle (EV) charging devices	EV charging devices per 100,000 population	DfT	2022	
3	Recycled waste	Share of non-domestic waste generated that is recycled / reused / composted per capita	Multiple	2018-2020	Separate sources for England, Wales and Scotland
4	Greenhouse gas emissions	Territorial greenhouse gas emissions (kt CO_2) per 100,000 population	BEIS	2020	
5	Share of new non-domestic EPCs lodged >'C'	Share of all non-domestic EPCs lodged that have an EPC rating of 'C' and above	DLHC, Scottish government	2008-2020	
6	Indices of multiple deprivation (IMD)	IMD average scores	Multiple (respective country IMD)	2019	
7	Travel time to workplace by cycle	Average travel time in minutes to cycle to nearest employment centre (>500 employees)	ONS	2019	
8	Renewable energy potential	Direct normal irradiance, and mean power density for 10% windiest areas, for each local authority	Global Solar Atlas, Global Wind Atlas	2022	Wind and solar power scores combined to produce one main indicator score
9	Access to Healthy Assets and Hazards (AHAH)	Index scores ranking how 'healthy' neighbourhoods are	Consumer Data Research Centre (CDRC)	2022	
10	Proximity to nearest major rail station	Average minimum journey time to the nearest rail station by public transport or walking, as measured during peak morning travel times	DfT	2017	
11	Proximity to nearest major airport	Average minimum journey times to the nearest airport, as measured during peak morning travel times	DfT	2017	
12	Travel time to nearest employment centre (>5,000 employees)	Average minimum journey time to nearest employment centre (>5,000 employees)	Various	2019	Separate sources for England, Wales and Scotland

People and workforce factors

#	Indicator	Description	Source	Availability	Comment
1	NVQ4+ qualification level	Share of population possessing qualifications at the NVQ4+ level	Nomis	2021	
2	Worker productivity	Gross value added (GVA) per job filled	ONS	2020	
3	Employable population	Count of economically active individuals in each local authority district	Annual Population Survey	2021	
4	Innovation activity	Proportion of businesses that are considered innovation active	UK Innovation Survey	2020	Data available for ITL2 regions only*
5	Internet-user prevalence	Share of population classed as internet users	ONS	2020	
6	Life satisfaction	Average life satisfaction ratings	ONS	2021	
7	Healthy life expectancy	Average life expectancy of an individual in each local authority	ONS	2018-2020	
8	Higher education institutions	Quantity and quality of higher education institutions in each local authority area	UCAS, Times Higher Education University Rankings	2018, 2022	

Financial and commercial factors

#	Indicator	Description	Source	Availability	Comment
1	Inward foreign direct investment (FDI)	Inflows of cross-direct investment (£m)	ONS	2020	Data available for ITL2 regions only
2	Online connectivity	Fixed and mobile broadband speeds and coverage	Ofcom	2022	
3	Rateable value per metre squared	Notional annual rent of a rateable property divided by floorspace	Valuation Office Agency	2022	Data available for England and Wales
4	Regional disparities in labour and material costs	Comparative cost of construction in the UK by region	Costmodelling	2022	Data available by region including Inner and Outer London split
5	Proximity to nearest enterprise area	Average minimum journey times to the nearest enterprise area	National government sites (gov.uk etc)	2022	Mapped manually

* For indicators where data was only available for ITL2 regions, local authorities were assigned the score of the ITL2 regions they are located in.

Data limitations

EPC ratings

It is to be noted that data on the share of non-domestic properties above a certain EPC rating for Scotland, and England and Wales, are not directly comparable. This issue stems from differing methodologies used to calculate EPC ratings, with the methodology adopted in England and Wales including a comparison with notional – or theoretical – building emissions, which are not used in Scotland.

This means a building in England or Wales could appear to be more energy efficient than the same building in Scotland, which may make it more attractive to occupiers and investors. To account for this and align the EPC ratings, the data utilised for this index looks at the share of non-domestic properties with an EPC rating of 'C' and above in England and Wales, and the share of non-domestic properties with an EPC rating of 'D' and above in Scotland. This, however, does not mitigate the comparability issues between EPC ratings in England and Wales, and Scotland, and scores for this indicator should not be used in isolation.

Rateable value figures

The Valuation Office Agency produces estimates on the rateable value per metre squared by administrative area for England and Wales, and the data utilised is correct as of 31 March 2022. Unfortunately, Scotland does not publish such data, with the closest being total rateable value for non-domestic properties by administrative area. As such, rateable value per metre squared figures for Scottish local authorities were imputed using a regression employing total rateable value and GVA as the independent variables (with English and Welsh local authorities as the sample).

The index construction methodology was then utilised to translate the rateable value figures into indicator scores.

Disclaimer

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ISG is a dynamic global construction services company. We have had a hand in some of the world's most impactful and recognisable places, but our legacy is about far more than buildings. Across Europe, the Middle East and Asia, we deliver places where people and businesses make memories, forge new experiences, and reach their goals. In short, we deliver the places that enable people and businesses to thrive.

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